

## CLAIMS:

*I claim:*

- 5 1. A computer interface system, comprising:  
a microphone that receives audio input from a user;  
a voice recognition mechanism; and  
a graphical user interface that prompts the user for expected inputs that the user can speak  
at designated points in a dialog according to a specified grammar;  
10 wherein prompts may specify the type of expected input;  
wherein prompts may specify words that are recognized by the system.
2. The system according to claim 1, wherein prompts that represent non-terminal tokens in  
the grammar are replaced with one of a set of other prompts in the grammar in response to  
15 spoken input.
3. The system according to claim 1, wherein the graphical user interface is built  
automatically from a single dictionary and grammar specification.
- 20 4. The system according to claim 1, further comprising:  
at least one speaker that provides audio prompts for expected inputs.
5. The system according to claim 1, wherein a prompt may further comprise a second  
graphical user interface window.  
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6. The system according to claim 1, wherein the graphical user interface further comprises a  
pull-down menu.
7. The system according to claim 1, further comprising a set of reserved words that activate  
30 specified prompts when spoken by the user.

8. A computer program product in a computer readable medium for use in a computer interface system, the computer program product comprising:

first instructions for receiving audio input from a user;

second instructions for automatic voice recognition; and

5 third instructions for displaying a graphical user interface that prompts the user for expected inputs that the user can speak at designated points in a dialog according to a specified grammar;

wherein prompts may specify the type of expected input;

wherein prompts may specify words that are recognized by the system.

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9. The computer program product according to claim 8, wherein prompts that represent non-terminal tokens in the grammar are replaced with one of a set of other prompts in the grammar in response to spoken input.

15 10. The computer program product according to claim 8, wherein the graphical user interface is built automatically from a single dictionary and grammar specification.

11. The computer program product according to claim 8, further comprising:  
fourth instructions for outputting audio prompts for expected inputs.

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12. The computer program product according to claim 8, wherein a prompt may further comprise a second graphical user interface window.

25 13. The computer program product according to claim 8, wherein the graphical user interface further comprises a pull-down menu.

14. The computer program product according to claim 8, further comprising a set of reserved words that activate specified prompts when spoken by the user.

30 ~~14.~~ 15 A method for interfacing between a computer and a human user, the method comprising the computer implemented steps of:

receiving audio input from the user;  
interpreting the audio input via voice recognition; and  
displaying a graphical user interface that prompts the user for expected inputs that the  
user can speak at designated points in a dialog according to a specified grammar;

5        wherein prompts may specify the type of expected input;  
      wherein prompts may specify words that are recognized by the system.

16.    The method according to claim 15, wherein prompts that represent non-terminal tokens in  
the grammar are replaced with one of a set of other prompts in the grammar in response to  
10    spoken input.

17.    The method according to claim 15, wherein the graphical user interface is built  
automatically from a single dictionary and grammar specification.

15    18.    The method according to claim 15, further comprising:  
      outputting audio prompts for expected inputs.

19.    The method according to claim 15, wherein a prompt may further comprise a second  
graphical user interface window.

20    20.    The method according to claim 15, wherein the graphical user interface further comprises  
a pull-down menu.

21.    The method according to claim 15, further comprising a set of reserved words that  
25    activate specified prompts when spoken by the user.